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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,967	12/21/2001	James Chow	01-S-078	7501
30428	7590	05/25/2006	EXAMINER	
STMICROELECTRONICS, INC. MAIL STATION 2346 1310 ELECTRONICS DRIVE CARROLLTON, TX 75006			PHU, PHUONG M	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,967

Applicant(s)

CHOW ET AL.

Examiner

Phuong Phu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 3/23/06.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3, 6, 9-14 and 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1 and 12 recite the limitation “the second strobe signal output from the delay element is independent of a phase of the first strobe signal”. This limitation is not disclosed in the specification of the instant application.

This limitation is not found anywhere in the specification. Further, as described in the specification, the first strobe signal (520) (see figure 5) is delayed by the delay (522) to produce the second strobe signal. Since the first strobe signal is the input of the delay to provide the second strobe signal as its output signal, the phase of the second strobe signal is inherently dependent on the phase of the first strobe signal. Eventually, the phase of the second strobe signal, then, would be a sum of the phase of the first strobe signal and a phase being caused to the first strobe signal by the delay time of the delay.

Claims, dependent on above claims, are therefore, also rejected.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (6,538,486), previously cited.

-Regarding to claim 7, see figures 1 and 2, and col. 1, lines 10-40 and col. 2, line 18 to col. 3, line 40, Chen et al discloses a system (see figure 2) comprises:

a latch circuit (18) for sampling a differential data signal (V_{IN}) in response to a first strobe signal (being derived from (22));

an inverter element (considered here equivalent with the limitation “delay element”), the first strobe signal being an input to the inverter element (see figure 2, the inverter element located at a trigger input of (20)) (note that the inverter element is considered equivalent with the limitation “delay element” because the inverter element inherently delays its input signal to

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produce its output via the inverting process of the inverter; and in order to clarify the inherency of the delaying function of an inverter, see reference (5,945,862) previously-cited), and

a strobe circuit (20) coupled to the latch circuit, the strobe circuit capturing the output of the latch circuit based on a second strobe signal (being derived from (22)) outputted from the inverter element (see figure 2);

wherein the latch circuit (see figure 1) includes:

an input (A),

an input branch (2) and a latch branch (5) connected in parallel between the input (A) and an output (to the input of I_0) ; and

a control transistor (comprising a transistor located below the input branch (2) (for receiving Clk) and (I_0)), (the control transistor considered here equivalent with the limitation “transistor bias current control transistor”), coupled in series between the output (to the input of I_0) and both the input branch (2) and the latch branch (5) (see figure 1).

-Regarding to claim 8, Chen et al discloses that the input branch of the latch circuit includes: a pair of differential input transistors (2) electrical coupled to the input; and a single strobe transistor (receiving Clk-) coupled in series between the pair of differential input transistors and the control transistor (see figure 1).

Response to Arguments

6. Applicant's arguments filed on 3/23/06 have been fully considered but they are not, in part, persuasive.

Applicant's arguments with respect to claims 1-3, 6, 9-14 and 16-20 have been considered. The previous rejections to the claims have been withdrawn. However, the claims,

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after being amended, are deemed to be rejected 35 U.S.C. 112, first paragraph with reasons set forth above in this Office Action.

Applicant's arguments with respect to claims 7 and 8 are not persuasive. The applicant mainly argues that Chen et al does not teach or disclose a bias current control transistor coupled in series between the output and both the output branch and the latch branch.

The examiner respectfully disagrees. Note that the rejection is based on the limitation given in the claims. See figure 1, Chen et al discloses a control transistor (comprising a transistor located below the input branch (2) (for receiving Clk) and (I_0)), (the control transistor considered here equivalent with the limitation "transistor bias current control transistor"), coupled in series between the output (to the input of I_0) and both the input branch (2) and the latch branch (5), as claimed.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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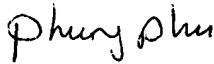
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHUONG PHU
PRIMARY EXAMINER


Phuong Phu
05/22/06

Phuong Phu
Primary Examiner
Art Unit 2611